

## Cyclin O Antibody

Catalog # ASC10435

#### **Specification**

## **Cyclin O Antibody - Product Information**

Application WB
Primary Accession P22674

Other Accession
Reactivity
Host
Clonality

NP\_066970, 153791755
Human, Mouse, Rat
Rabbit
Polyclonal

lsotype IgG

Calculated MW
Application Notes
Cyclin O antibody can be used for the

detection of Cyclin O by Western blot at 1 -

2 μg/mL.

# **Cyclin O Antibody - Additional Information**

Gene ID **10309** 

**Other Names** 

Cyclin O Antibody: CCNU, UDG2, Cyclin-O, Cyclin O

#### Target/Specificity

CCNO; At least two isoforms of Cyclin O are known to exist; this antibody will recognize both isoforms.

# **Reconstitution & Storage**

Cyclin O antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

Cyclin O Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Cyclin O Antibody - Protein Information**

## Name CCNO (HGNC:18576)

#### **Function**

Specifically required for generation of multiciliated cells, possibly by promoting a cell cycle state compatible with centriole amplification and maturation. Acts downstream of MCIDAS to promote mother centriole amplification and maturation in preparation for apical docking.

## **Cellular Location**

Cytoplasm. Nucleus, nucleolus Note=Localizes to the apical part of cytoplasm

## **Tissue Location**



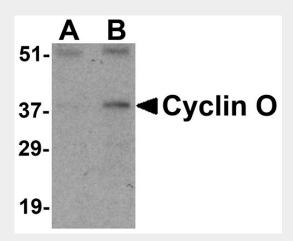
Present in respiratory cells (at protein level).

# **Cyclin O Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Cyclin O Antibody - Images



Western blot analysis of Cyclin O in mouse bladder tissue lysate with Cyclin O antibody at (A) 1 and (B) 2  $\mu$ g/mL.

## Cyclin O Antibody - Background

Cyclin O Antibody: Cyclin O, also known as CCNO, has recently been identified as a Cdk1- and Cdk2-activating cyclin specific to apoptosis in lymphoid cells. Cyclin O binds to and activates Cdk2 in response to instrinsic apoptotic stimuli such as glucocorticoids or DNA-damaging agents. Supression of Cyclin O expression by shRNA leads to the inhibition of glucocorticoid and DNA-damage-induced apoptosis due to a failure of apical caspase activation while leaving the CD95 death receptor-mediated apoptosis intact. Note: this gene, which had a previous symbol of UNG2, was erroneously identified as a uracil DNA glycosylase. A later publication identified this gene's product as a cyclin protein family member.

## **Cyclin O Antibody - References**

Roig MB, Roset R, Ortet L, et al. Identification of a novel cyclin required for the intrinsic apoptosis pathway in lymphoid cells. Cell Death Diff. 2009; 16:230-43.

Muller SJ and Caradonna S. Isolation and characterization of a human cDNA encoding uracil-DNA glycosylase. Biochim. Biophys. Acta 1991; 1088:197-207.

Muller SJ and Caradonna S. Cell cycle regulation of a human cyclin-like gene encoding uracil-DNA glycosylase. J. Biol. Chem. 1993; 268:1310-9